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July 27, 2011

Via Electronic Filing

Ms. Marlene H. Dortch, Secretary Federal Communications Commission Office of the Secretary 445 12th Street, SW Washington, D.C. 20554

Re: Ex Parte Notice, ET Docket No. 10-235, EB Docket No. 04-296, and PS Docket No. 07-287

Dear Ms. Dortch:

Pursuant to 47 C.F.R. § 1.1200, *et seq.*, Harris Corporation ("Harris") hereby notifies the Federal Communications Commission ("Commission") of the following ex parte communication in the above-referenced proceedings. On July 25, 2011, Evan Morris of Harris, and Mark Richer of the Advanced Television Systems Committee ("ATSC") met with Erin McGrath of Commissioner Robert M. McDowell's Office. A copy of Harris' presentation has been filed concurrently with this Ex Parte Notice. ATSC has filed a separate Ex Parte Notice in this proceeding.

Harris' presentation focused on the implementation of the suite of ATSC digital broadcast television standards. Broadcast equipment manufacturers, like Harris, are continuously innovating and exploring ways to implement greater efficiency in broadcast equipment that maximizes the power of the ATSC Standard and broadcasters' use of bandwidth. Broadcasting is in the midst of a technological renaissance. The nationwide deployment of MDTV services signifies the start of broadcasters' ability to offer new innovative mobile services, in addition to traditional linear broadcast services. Conclusions regarding broadcasters' bandwidth requirements must be based on both their current and future spectral needs. It is critical to the development of the digital broadcast market that any channel sharing or incentive auction paradigm is implemented on a voluntary basis and provides broadcasters the ability to both their current level of service—such as multicasting and HDTV—and implement new services—such as 3DTV, MDTV and other non real-time ("NRT") services. Furthermore, any repacking plan must allow broadcasters to maintain their current terrestrial and mobile signal coverage, and not result in any additional interference from other services—broadcast and non-broadcast.

During the meeting, Harris outlined the bandwidth requirements needed by broadcasters to offer MDTV services in conjunction with their existing DTV services. While a single, high quality, MDTV stream requires 2.75 Mbps, in order to offer a robust MDTV service many stations will likely provide multiple MDTV streams. Broadcasters' use of spectrum is dynamic



and broadcast equipment has been manufactured to support a range of dynamic uses across a broadcasters 6 MHz channel (19.39 Mbps stream). Broadcasters should not have to face an "either or proposition" regarding the innovative services they choose to offer. For example, the Open Mobile Video Coalition's Washington D.C. Consumer Showcase featured eight television and one radio stations that provided 23 channels of content, while all continuing to offer their pre-existing terrestrial broadcast services.<sup>1</sup>

Harris representatives also highlighted the technical restrictions, as understood by the laws of physics, regarding broadcasters' use of the VHF spectrum for providing MDTV services. In order to receive a MDTV signal in the VHF band that is equivalent to that of a MDTV signal in the UHF band, a mobile device will require an antenna that is nearly 8.5 inch in length, something that is impractical for a mobile device. In particular, Harris encouraged the Commission not to force broadcasters to relocate from UHF to VHF spectrum as part of any repacking plan. Doing so would limit broadcasters' ability to take advantage of current and future MDTV services. In order to extract the greatest value from all spectrum bands Harris reiterated its recommendation that Commission conduct a study to better understand the rising noise floor in the VHF spectrum band and determine how Commission rules can be modified to make VHF spectrum more desirable.<sup>2</sup>

Finally, Harris noted how recent natural disasters in both Japan and the United States serve as stark reminders of both the public interest value of broadcasting and the infrastructure benefits of the broadcasting model. In particular, the use of Japan's 1-Seg MDTV service proved instrumental in providing reliable communication and emergency warnings between the government and citizens prior, during, and after the earthquake and tsunami. Likewise, broadcasting served as a critical means of providing both warnings and post-disaster information following the deadly tornado in Joplin, Missouri. While the aforementioned catastrophes occurred in different parts of the world, in both cases when commercial cell networks were brought down by the disasters broadcasting was the only ubiquitous communications service available to communicate with the public.

If the United States is going to have a truly ubiquitous and redundant advanced emergency alerting system, MDTV must be an integral part of the solution. In fact, later this year PBS, utilizing LG handsets and Harris transmission equipment, will launch a pilot project that will provide multimedia emergency alerts using video, audio, text, and graphics to a myriad of consumer devices, including cell phones, tablets, laptops and netbooks, and in-car navigation

<sup>&</sup>lt;sup>1</sup> Comments of the Open Mobile Video Coalition, ET docket No. 10-235, at 5 (filed March 18, 2011).

<sup>&</sup>lt;sup>2</sup> Comments of Harris Corporation, ET Docket No. 10-235, at 4-5 (filed March 18, 2011).

<sup>&</sup>lt;sup>3</sup> Id. at 8.

<sup>&</sup>lt;sup>4</sup> "Joplin Radio Station Aids Tornado Survivors," NPR.org (May 25, 2011), http://www.npr.org/2011/05/25/136636384/joplin-radio-station-is-a-lifeline-for-tornado-survivors; Basu, Moni, "Radio Stations Chug Along 24/7 in tornado-devastated Joplin," CNN.com (May 24, 2011), http://www.cnn.com/2011/US/05/24/missouri.tornado.radio/index.html?iref=allsearch.



systems.<sup>5</sup> This MDTV Emergency Alert System will be a complement to the cellular-based emergency alerting system currently being developed by the Commission and Department of Homeland Security.

Harris looks forward to continuing to work with the Commission to facilitate the deployment of innovative broadcast technologies, such as commercial MDTV services, NRT services, 3DTV, and MDTV Emergency Alerting.

Respectfully submitted,

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Evan S. Morris, Esq.

Counsel, Government Relations

Harris Corporation

Attachments (1)

CC (via electronic mail):

Erin McGrath, Acting Legal Advisor, Media, Office of Commissioner Robert M. McDowell

<sup>5</sup> "PBS' Landmark Next Generation Emergency Alert System Pilot Project to Use Mobile Digital TV," Press Release (Apr. 12, 2011), <a href="http://www.pbs.org/about/news/archive/2011/mobile-dtv-eas/">http://www.pbs.org/about/news/archive/2011/mobile-dtv-eas/</a>.

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